

U.S. Application Serial No. 10/603,279
Office Action Mailed May 1, 2007
Amendment in response filed on September 4, 2007

RECEIVED
CENTRAL FAX CENTER
SEP 04 2007

AMENDMENTS TO THE CLAIMS

The following listing of the Claims replaces all previous versions and listings of the Claims.

1. (Previously Presented) A method for removing asparagine or converting asparagine to a different substance by hydrolyzing the amide group of the asparagine to form aspartic acid in a corn-based food material comprising adding asparaginase enzyme to the food material before heating.
2. (Canceled)
3. (Previously Presented) The method of claim 1, wherein at least about 10% of the asparagine is converted to a different substance or removed.
4. (Canceled)
5. (Previously Presented) A method for removing asparagine or converting asparagine to a different substance by hydrolyzing the amide group of the asparagine to form aspartic acid in a corn-based food material, comprising:
 - (1) adding asparaginase enzyme to the corn-based food material, wherein said corn based food material comprises asparagine;
 - (2) optionally mixing the enzyme with the corn based food material;
 - (3) allowing a sufficient time for the enzyme to react with the asparagine; and
 - (4) optionally deactivating or optionally removing the enzyme.
- 6-9. (Canceled)
10. (Previously Presented) A method for reducing the level of acrylamide formed in heated corn-based food products, comprising:
 - (1) adding asparaginase to a corn-based food material, wherein said corn-based food material comprises asparagine;
 - (2) optionally mixing the enzyme with the corn-based food material;

U.S. Application Serial No. 10/603,279
Office Action Mailed May 1, 2007
Amendment in response filed on September 4, 2007

- (3) allowing a sufficient time for the enzyme to react with the asparagine whereby at least a portion of the asparagine is removed or is converted to a different substance by hydrolyzing the amide group of the asparagine to form aspartic acid;
- (4) optionally deactivating or optionally removing the enzyme; and
- (5) heating the corn-based food material to form the heated corn-based food product.

11. (Previously Presented) A corn-based food material prepared according to the method of claim 1, wherein at least about 10% of the asparagine is converted to a different substance or is removed.

12. (Previously Presented) A corn-based food material prepared according to the method of claim 1, wherein at least about 30% of the asparagine is converted to a different substance or is removed.

13. (Previously Presented) A corn-based food material prepared according to the method of claim 1, wherein at least about 50% of the asparagine is converted to a different substance or is removed.

14. (Previously Presented) A corn-based food material prepared according to the method of claim 1, wherein at least about 70% of the asparagine is converted to a different substance or is removed.

15. (Previously Presented) A corn-based food material prepared according to the method of claim 14, wherein at least about 90% of the asparagine is converted to a different substance or is removed.

16-44. (Canceled)